IN THE FIGURES:

Please substitute the provided set of Figures for the original set of Figures. The only amendment is to Figure 1, element number 1960a, which has been amended to element number 190a to correct a typographical error. The amended element number corresponds to references in the Specification, which refer to element 190a. *See, e.g.*, Applicant's Specification, page 10, lines 24-26.

REMARKS

This Amendment is filed in response to the Office Action mailed March 3, 2006. All objections and rejections are respectfully traversed.

Claims 1-52 are in the case.

Claims 1, 6, 8, 10, 15, 20, 22, 26, and 28 were amended to better claim the invention.

Claims 30-52 were added to better claim the invention.

At Paragraph 2 of the Office Action, claims 1-14 and 16-29 were rejected under 35 U.S.C. § 102(b) as being anticipated by Permut et al., U.S. Patent No. 6,260,115 B1, issued on July 10, 2001 (hereinafter "Permut"). At Paragraph 3 of the Office Action, dependent claim 15 was rejected under 35 U.S.C. § 103 as being unpatentable over Permut in view of Vishlitzky et al., U.S. Patent No. 5,649,156, issued on July 15, 1997.

The present invention, as set forth in representative claim 1 as amended, comprises in part:

> 1. A method for a storage operating system implemented in a storage system to optimize the amount of readahead data retrieved for a read

stream established in a data container stored in the storage system, the method comprising:

receiving a client read request at the storage system, the client read request indicating client-requested data for the storage operating system to retrieve from the data container containing the read stream;

determining whether the storage operating system is permitted to retrieve reada-head data from the data container in response to the received client read request;

if it is determined that the storage operating system is permitted to retrieve reada-head data from the data container, performing the steps of:

(i) ***selecting an amount of readahead data to retrieve from the data container based on a plurality of factors***; and

(ii) retrieving the selected amount of readahead data from the data container.

Permut discloses a method for detecting and remembering sequential access patterns for the purpose of prestaging tracks ahead of the current access request. The number of tracks to prestage is determined by a single factor.

Specifically, in Permut, "if the host contains prestaging or sequential hints, the process... determine[s] the number of tracks desirable to prestage ahead of the current access request based *only* on the host provided hint." Permut, col. 10 lines 32-36 (emphasis added). Thus, Permut discloses only the use of a single factor in determining the desired number of tracks to prestage.

Where the host does not provide a hint, the desired number of tracks to prestage is based on the "state" of a detected sequential access pattern. Permut, col. 13 lines 2-3. This state may be "candidate", "sequential", or "very sequential", each state corresponding to a fixed number of desired tracks to prestage. Permut, col. 6 lines 37-41; col. 13 lines 2-3. State is determined *only* by the number of sequential access requests. Permut, col. 6 lines 48-50 (counter counts sequential access requests); col. 9 line 57-col. 10 line 6 (when counter surpasses a first threshold, state equals "sequential"); col. 12 lines 54-61 (when counter surpasses a second threshold, state equals "very sequential"). Thus, when the host does not provide a hint, the desired number of tracks to prestage is based *only* on the number of sequential access requests. Again, Permut only discloses the use of a single factor.

In sharp contrast, Applicant claims ***selecting an amount of readahead data to retrieve from the data container based on a plurality of factors***. Applicant teaches various example factors throughout the Specification. *See e.g.* Applicant's Specification, page 28, lines 9-30.

Permut is completely silent regarding Applicant's claimed novel ***selecting an amount of readahead data to retrieve from the data container based on a plurality of factors***. Therefore, independent claim 1 is believed to be in condition for allowance under 35 U.S.C. § 102(b).

The above discussion in reference to claim 1 likewise applies to the remaining rejected independent claims 16, 22, and 28. Therefore, all independent claims are believed to be in condition for allowance.

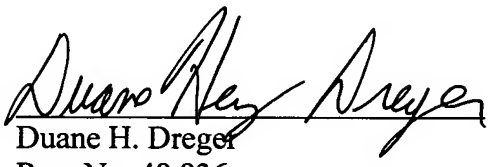
Dependent claims 2-15, 17-21, 23-27, and 29 are believed to be dependent from allowable independent claims, and likewise in condition for allowance. Therefore, all dependent claims are believed to be in condition for allowance.

Favorable action is respectfully solicited.

In the event that the Examiner deems personal contact desirable in disposition of this case, the Examiner is encouraged to call the undersigned attorney at (617) 951-2500.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,



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